

SKYARTEC

# 5通道遥控器

## 使用说明书

SKY502

# SKY2.4GHz

## RADIO SYSTEM INSTRUCTION MANUAL

5 CHANNEL DIGITAL PROPORTIONAL RADIO CONTROL SYSTEM



## INTRODUCTION 介绍

SKY502是SKYARTEC公司新研发上市的2.4GHz的5通道的遥控器。采用全新的数字技术,具有响应速度快、精度高和不抖舵的特点; 2.4的跳频技术, 具有自动对频,自动分配ID,增加了抗干扰能力;可适用于直升机和飞机两类模型, 以及正常飞行和特技飞行模式。调机设置简单, 信号稳定, 耗电量小, 信号功率强。适合于初学或业余模友。

Sky502, the latest design from Skyartec, is the 2.4Ghz of 5ch radio control for the market. It adopts the brand new digital technology with the features: fast response, High-precision and non-affect servos. The 2.4G frequency hopping covers Automatic frequency matching, ID sorting that enlarges the capacity of its resisting disturbance; It is suitable for helicopters and planes with normal flight and aerobatics. Also, it comes with the advantages of easy setting, steady signal, small power consumption and Strong signal power. Sky502 is available for novice and pilots.

## SPECIFICATION 遥控器规格

### 发射机规格

通道数: 5通道  
频率: 2.4G跳频  
输出功率: <0.8mW  
静态电流: <250mA  
电 源: 1.5V 8节干电池  
输出脉冲: 1100-1900Ms  
模拟插口: 有  
充电插口: 有  
重量: 560  
电压显示方式: LED  
天线长度: 14cm

### Transmitter specifications:

Channel: 5CH  
Frequency: 2.4G frequency hopping  
Output power: <0.8mW  
static current: <0.8mA  
Power resource: 1.5V×8 "AA" dry battery  
Output pulse: 1100-1900Ms  
Simulator jack: Yes  
Charging jack: Yes  
Weight: 560g  
Voltage display type: LED  
Antenna length: 14cm

### 接收机规格:

通道数: 7通道  
频率: 2.4G跳频  
灵敏度: 95dbm  
重量: 15g  
尺寸: 43x21x10mm

### Receiver specifications:

Channel: 7CH  
Frequency: 2.4G frequency hopping  
Sensitivity: 95dbm  
Weight: 15g  
Size: 43x21x10mm

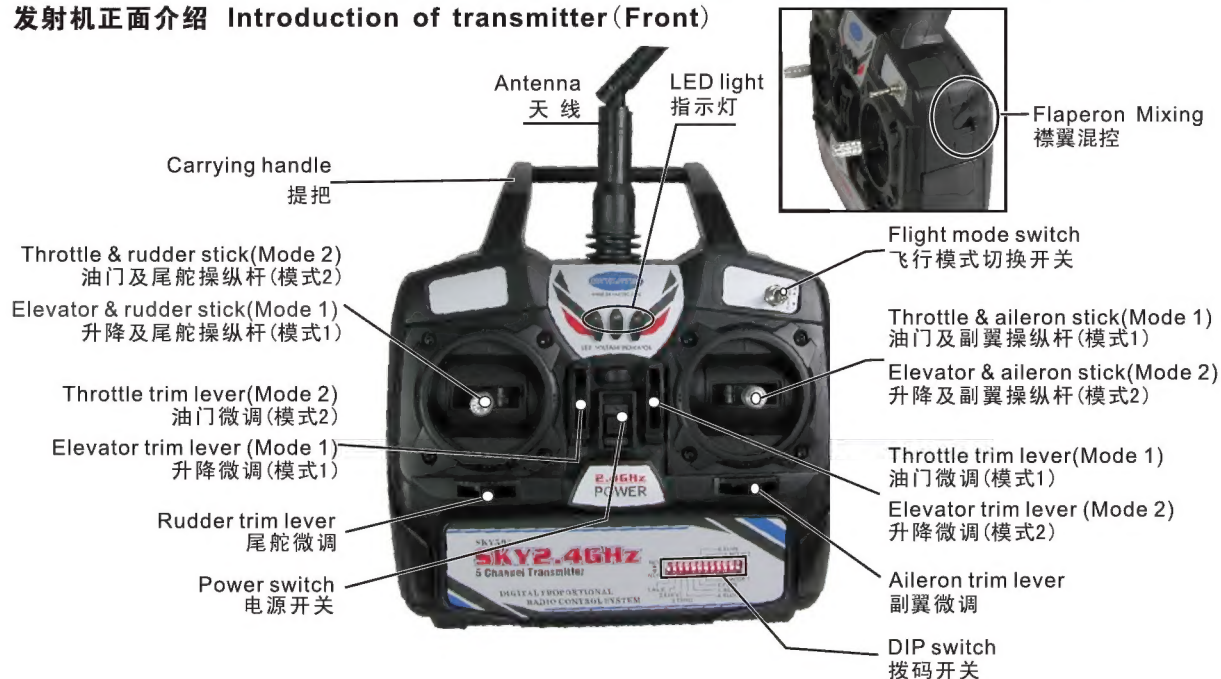
## PRECAUTION 注意事项

- 1, 本产品适用于不小于14周岁的人群。
- 2, 遥控模型飞行时存在潜在的危險性。飞行时必须远离人群、高层建筑、高压电线等。
- 3, 不要在黑夜、风雨、雷电等恶劣天气下使用, 以确保自身、周围人群和财产的安全。
- 4, 请勿自行改装或者维修, 请在产品功能允许的范围内进行操作和作用。
- 5, 开机前确认遥控器的油门处于最低位置。
- 6, 开关机时必须遵守电源开, 关机的顺序。开机时应先开启遥控器电源, 再接通飞机电源; 关机时应先断开飞机电源, 再关闭遥控器。
- 7, 确认舵机执行遥控指令的方向是否正确, 顺畅。

1. This product is suitable for the people above 14.
2. RC model gets definite risk when flight. Be clear that away from Crowd, high building and High-voltage wire.
3. Do not fly in the bad weather such as dark night, rainy day, thunder and lightning to ensure the safety.
4. Do not make alterations or maintenance, please operate the product according to its function.
5. Be sure the throttle at the lowest position before switching on the radio.
6. Pay attention to the sequence when turning on / off. Turn on the power, and then connect to the plane to start with; Turn off the power and disconnect the radio control to be close.
7. Be sure if the servos perform the correct direction swimmingly or not.

## INTRODUCTION OF THE RADIO SYSTEM 遥控系统介绍

### 发射机正面介绍 Introduction of transmitter (Front)



### 发射机背面介绍 Introduction of transmitter (back)



We can't provide the 8AA dry battery for the radio control, and it doesn't include in the scope of our products.

发射机动力所需的8节干电池,不包含在产品范围内。



## Transmitter indicator's description 发射机指示灯(LED)的说明:



RED 红灯 Green 绿灯

Three indicator lights (included red and green lights) are bright:  
the battery has been full charged, you can fly.

Two indicator lights (included red and green lights) are bright:  
the electricity shortage, if you continue to fly, maybe it will happen bad situation, such as  
out of control etc.

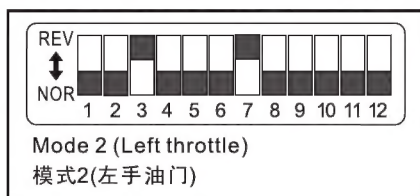
Only red light is bright:  
the electricity shortage seriously. You should stop fly immediately.

红绿灯3个灯亮: 电量充足, 可以飞行;

红绿灯2个灯亮 : 电量不足, 如果继续飞行, 可能会出现失控等不良状况;

单独红灯亮 : 电量严重不足, 必须立即停止飞行.

## Setting the DIP switch 拨码开关设置

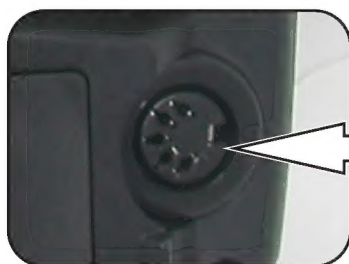


Mode 2 (Left throttle)  
模式2(左手油门)

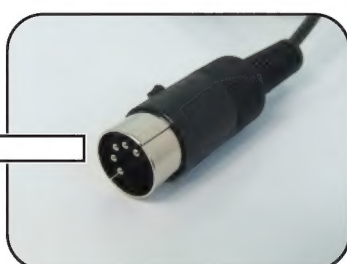
- 1-副翼, 2-升降舵, 3-油门, 4-尾舵, 5-副翼的正/逆转换开关;
- 6 为“三角翼”飞机或“固定翼(包括四通道直升机)”飞机选择开关。如果模型为“三角翼”飞机时“6”拨向REV(实现“ELVN”功能), 如果模型为“固定翼”飞机时“6”拨向NOR(实现“FLPN”功能);
- 7 为模式选择设置。模式1(右手油门): “7”拨向NOR;  
模式2(左手油门): “7”拨向REV;
- 8, 9, 10, 11, 12 预备升级用的, 暂时没有功能作用。

- 1-aileron, 2-elevator, 3-throttle, 4-rudder, 5-aileron Normal&Reverse switch;
- 6-Model select switch, used for choosing the “triangle wing” plane or “fixed-wing” plane (included the 4CH helicopter). if you desire for “triangle wing” plane, please switch the No. 6 DIP switch to the “REV” position (namely, the “ELVN” function), and switching to “NOR” position is for “fixed-wing” plane (namely, the “FLPN” function);
- 7-Mode select function: put the No. 7 DIP switch to “NOR” position, it means you choose Mode 1 (Right throttle); on the contrary, if you put it to “REV” position, it means you choose Mode 2 (Left throttle).
- The No. 8, 9, 10, 11, 12 DIP switches are designed for upgrade, So no function at the moment.

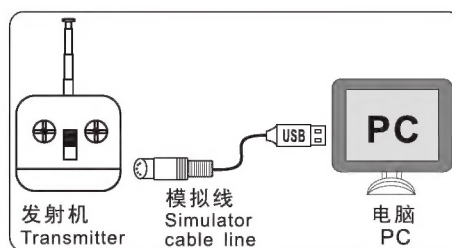
## 模拟器 Simulator



Simulator jack  
发射机模拟线插孔



Simulator cable line plug  
(connect the transmitter)  
模拟线插头(连接发射机)



Connection diagram of the transmitter  
and PC  
发射机与电脑连接示意图

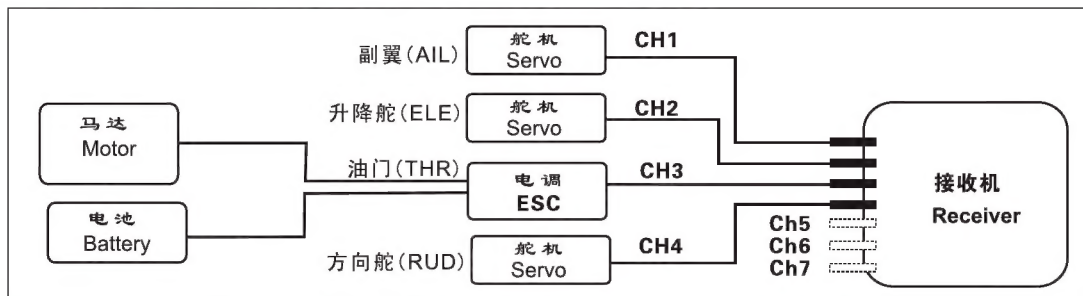
本公司提供的模拟线只能用于FMS, RealFlight G2模拟器, 具体详细操作说明请到官网([china.skyartec.net](http://china.skyartec.net))查找《FMS飞行模拟软件操作说明书》;

如果要试飞RealFlight G4, CSM等其它的模拟器, 要另外购买连接线。模拟线的连接方式与FMS的是相同的。

Please kindly note that the simulator cable line from our company only uses for FMS simulation, the detailed operation please go to our website([www.skyartec.com](http://www.skyartec.com)) and refer to our 《FMS user operation manual》.

If you want to fly with other simulated system RealFlight G4, CSM, you should buy another simulator cable line for them. and the connection way is the same as the FMS.

## 接收机连线图（以四通道为例） Connection diagram of Receiver (4CH)



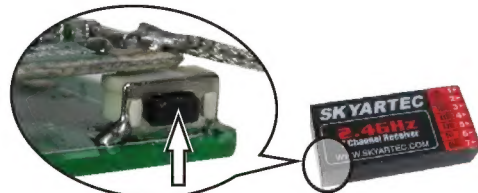
**备注:** 1, 如果是三通道飞机, 那么将第四通道的“方向舵(RUD)”接入第一通道的“副翼(AIL)”位置。  
2, 其它5, 6或者7通道等的接收机, 连接方法也是一样, 将第五通道以后多余的插孔空留着。

**Note:** 1. If your model only has 3 channels, then connect the servo(RUD) to "AIL" (CH1) of the receiver.  
2. For the receiver of 5CH, 6CH, 7CH or more, the connection way is the same as above. only need to keep the CH5 or more the redundant jacks of the receiver empty shown as above.

## 发射机与接收机的对频介绍:

首先开启发射机上的电源开关和接通接收机上的电源:

- 1, 接收机上的LED灯慢慢闪烁;
- 2, 按着接收机上的对频开关4~6秒钟, 这时LED灯是快速闪烁;
- 3, 放手后, LED灯是恒亮的, 表示对频成功;
- 4, 如果接收机上LED灯不亮, 表示没有信号。



对频按钮 Code pairing button

## Instruction for code pairing of transmitter and receiver:

First turn on the transmitter and connect the receiver

- 1, LED of the receiver flashes slowly
- 2, Press the code pairing button about 4~6 seconds, this moment, the LED flashes fast
- 3, After letting go the button, LED is light constantly, which indicates code pairing successful.
- 4, If LED is not light which indicates code pairing failed without signal.

**备注:** 在出厂时已经对好频了, 玩家在使用时不用再对了, 接通发射机和接收机电源就可能以使用了。

**Remark:** code pairing is no need because it was finished before go out. Buyers just need to turn on the transmitter and connect the receiver.

## THE TEST FOR THE RADIO SYSTEM

## 遥控器调试

开机操作顺序:

- 1, 把油门摇杆推到低位置;
- 2, 打开发射机电源开关;
- 3, 接通飞机电源(连接电池与电调的电源线)

关机操作顺序:

- 1, 切断飞机电源线
- 2, 关闭发射机电源开关;

## The operation steps for opening the transmitter:

1. set the throttle stick at the lowest position;
2. switch on the power of the transmitter;
3. connect the plane power. (namely, connect the wires of the battery and ESC).

## The operation steps for closing the transmitter:

1. Disconnect the battery from the plane;
2. Switch off the power of the transmitter.





## SETTING THE TRANSMITTER FOR TRIANGLE WING PLANE, 4CH HELICOPTER AND FIXED-WING PLANE. 发射机设置的三种情况:1, 三角翼飞机; 2, 四通道直升机; 3, 固定翼飞机。

### 1. setting the transmitter for triangle wing plane, such as F-16, SKYFUN.

1, 飞行三角翼飞机时发射机的设置, 如F-16, SKYFUN 三角翼飞机。

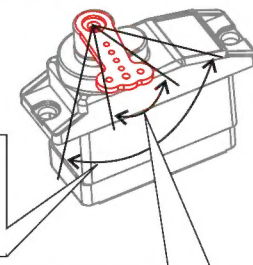
#### The introduction of the FLIGHT MODE switch 飞行模式(FLIGHT MODE)开关介绍

When switching the flight mode to the "N" position, it indicates the normal mode.

当飞行模式 (Flight mode) 切换开关 → "N" 时为正常模式。

When switching to the "1" position, the angle of the servo arm travel for both aileron and elevator reduce 50%.

当飞行模式 (Flight mode) 切换开关 → "1" 时, 副翼和升降翼的舵机摆臂行程角度减少一半。



DIP switch 拨码开关

#### Setting the DIP switch 拨码开关设置

⑤ 1-副翼, 2-升降舵, 3-油门, 4-尾舵, 5-副翼的正/反相选择开关;

⑥ 6 此时拨向REV (实现"ELVN"功能);

⑦ 7 为模式选择设置。模式1 (右手油门): "7" 拨向 "NOR";  
模式2 (左手油门): "7" 拨向 "REV";

⑧ 1-aileron, 2-elevator, 3-throttle, 4-rudder,  
5-aileron Normal&Reverse switch;

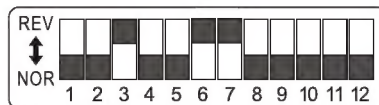
⑨ Please switch the No. 6 DIP switch to the "REV" position (namely, the "ELVN" function);

⑩ 7-mode select function; put the No. 7 DIP switch to "NOR" position, it means you choose Mode 1 (Right throttle); on the contrary, if you put it to "REV" position, it means you choose Mode 2 (Left throttle).



Mode 1 (Right throttle)

模式1 (右手油门)



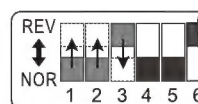
Mode 2 (Left throttle)

模式2 (左手油门)

1, 三角翼飞机是3通道飞机, 没有第4通道尾舵 (方向翼) 控制。

2, 在测试时, 如果舵机摆臂方向相反时, 你可以从正逆转开关进行纠正。

1. the triangle wing plane has 3 channels, without 4ch rudder controlling.  
2. when testing, if a servo arm operates in the reverse direction, you can change it from the Normal&Reverse switch.



### 2, 4通道直升机时发射机的设置, 如V1, V2, V3 (4通道) 等直升机。

Setting the transmitter for 4ch helicopter, such as wasp V1, wasp V2, wasp V3 (4ch)

#### 飞行模式(FLIGHT MODE)开关介绍

#### The introduction of the FLIGHT MODE switch

飞行模式 (Flight mode) 切换开关 → "N" 时为正常模式;

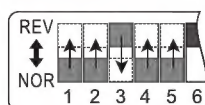
When switching the flight mode to the "N" position, it indicates the normal mode.



DIP switch 拨码开关

when testing, if a servo arm operates in the wrong direction, you can change it from the Normal&Reverse switch.

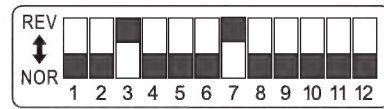
在测试时, 如果舵机摆臂方向相反时, 可以从正反相开关进行纠正。



### Setting the DIP switch 拨码开关设置

- ① 1-aileron, 2-elevator, 3-throttle, 4-rudder, 5-aileron Normal&Reverse switch;
- ② Please switch the No. 6 DIP switch to the "NOR" position (namely, the "FLPN" function);
- ③ 7-mode select function; put the No. 7 DIP switch to "NOR" position, it means you choose Mode 1 (Right throttle); on the contrary, if you put it to "REV" position, it means you choose Mode 2 (Left throttle).

- ① 1-副翼, 2-升降舵, 3-油门, 4-尾翼, 5-副翼的正/反相选择开关;
- ② 6 拨向NOR (实现"FLPN"功能);
- ③ 7 为模式选择设置。右手油门 (模式1): "7"拨向"NOR";  
左手油门 (模式2): "7"拨向"REV";



Mode 2 (Left throttle)  
模式2(左手油门)



Mode 1 (Right throttle)  
模式1(右手油门)

### Setting the transmitter for Fixed-wing plane, such as CESSNA.

3. 固定翼飞机时发射机的设置,如CESSNA固定翼飞机。

#### The introduction of the FLIGHT MODE switch

When switching the flight mode to the "N" position, it indicates the normal mode;  
When switching the Flight mode to the "1" position, the flaperon mixing can change the angle of the aileron, so advance the elevator function further.

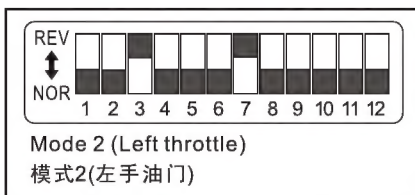


#### 飞行模式(FLIGHTMODE)开关介绍

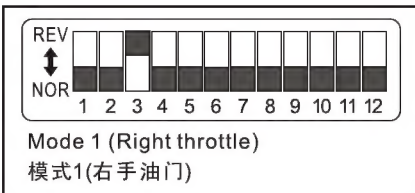
- ① 当飞行模式 (Flight mode) 切换开关 → "N" 时为正常模式;
- ② 当飞行模式 (Flight Mode) 切换开关 → "1" 时, 襟翼混控可以副翼的角度, 使飞机的升降功能更加明显。

襟翼混控改变副翼的角度  
Flaperon mixing can change the angle of aileron.

### Setting the DIP switch 拨码开关设置



Mode 2 (Left throttle)  
模式2(左手油门)



Mode 1 (Right throttle)  
模式1(右手油门)

- ① 1-aileron, 2-elevator, 3-throttle, 4-rudder, 5-aileron Normal&Reverse switch;
- ② Please switch the No. 6 DIP switch to the "NOR" position (namely, the "FLPN" function);
- ③ 7-mode select function; put the No. 7 DIP switch to "NOR" position, it means you choose Mode 1 (Right throttle); on the contrary, if you put it to "REV" position, it means you choose Mode 2 (Left throttle).

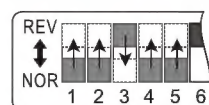
- ① 1-副翼, 2-升降舵, 3-油门, 4-尾翼, 5-副翼的正/反相选择开关;
- ② 6 拨向NOR (实现"FLPN"功能);
- ③ 7 为模式选择设置。右手油门 (模式1): "7"拨向"NOR";  
左手油门 (模式2): "7"拨向"REV";




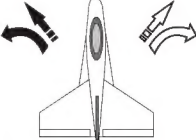
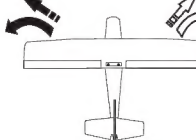



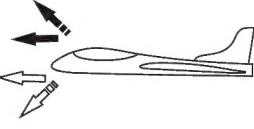
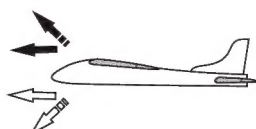

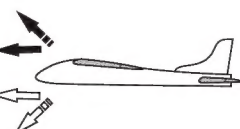









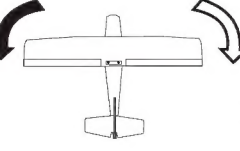


DIP switch 拨码开关

when testing, if a servo arm operates in the wrong direction, you can change it from the Normal&Reverse switch.

在测试时, 如果舵机摆臂方向相反时, 就在拨码开关上转换"正/反相"择选开关纠正。





The direction of the channel and stick 通道和摇杆方向	Triangle wing plane 三角翼飞机	Fixed-wing plane 固定翼飞机	Helicopter 直升机
<div data-bbox="204 409 443 537"> <div>MODE1</div>  </div> <div data-bbox="209 555 416 616"> 1通道: 副翼摇杆  CH1: aileron stick </div>	<div data-bbox="571 409 767 548">  </div> <div data-bbox="539 571 1402 678"> <p>When Moving the aileron stick to the right, the plane will turn to the right; On the contrary, when moving the aileron stick to the left, the plane will turn to the left.</p> <p>摇杆推向右, 飞机偏向右飞行; 摇杆推向左, 飞机偏向左飞行。</p> </div>	<div data-bbox="858 409 1054 548">  </div>	<div data-bbox="1161 443 1358 548">  </div>
<div data-bbox="204 707 443 835"> <div>MODE1</div>  </div> <div data-bbox="204 835 443 963"> <div>MODE2</div>  </div> <div data-bbox="209 974 429 1025"> 2通道: 升降摇杆  CH2: elevator stick </div>	<div data-bbox="555 734 810 862">  </div> <div data-bbox="842 734 1098 862">  </div> <div data-bbox="1161 757 1385 840">  </div> <div data-bbox="539 936 1402 1030"> <p>When the elevator stick is pushed up, the plane fly forward &amp; descend. When the elevator stick is pushed back, the plane fly forward&amp; ascend.</p> <p>摇杆推向上, 飞机向前往下飞行; 摇杆推向下, 飞机向前往上空飞行。</p> </div>	<div data-bbox="858 734 1098 862">  </div>	<div data-bbox="1161 757 1385 840">  </div>
<div data-bbox="204 1055 443 1182"> <div>MODE1</div>  </div> <div data-bbox="204 1182 443 1310"> <div>MODE2</div>  </div> <div data-bbox="209 1328 422 1386"> 3通道: 油门摇杆  CH3: throttle stick </div>	<div data-bbox="571 1115 810 1198">  </div> <div data-bbox="858 1115 1098 1198">  </div> <div data-bbox="1161 1055 1385 1243">  </div> <div data-bbox="539 1294 1402 1388"> <p>When the throttle stick is pushed up, it will advance the motor power; When the throttle stick is pushed back, the motor power will lower.</p> <p>摇杆往上推, 马达动力加强; 摇杆往下推, 马达动力减弱。</p> </div>	<div data-bbox="858 1115 1098 1198">  </div>	<div data-bbox="1161 1055 1385 1243">  </div>
<div data-bbox="204 1435 443 1563"> <div>MODE1</div> <div>MODE2</div>  </div> <div data-bbox="209 1579 448 1641"> 4通道: 尾翼(方向)摇杆  CH4: rudder stick </div>	<div data-bbox="571 1485 794 1547"> No rudder function  没有尾翼舵功能 </div> <div data-bbox="539 1630 1402 1718"> <p>When the rudder stick is moved to the right, the plane will turn to the right; When moving to the left, the plane will turn to the left.</p> <p>摇杆推向右, 飞机向右转飞行; 摇杆推向左, 飞机向左转飞行。</p> </div>	<div data-bbox="858 1451 1098 1601">  </div>	<div data-bbox="1161 1429 1358 1615">  </div>
<div data-bbox="268 1749 427 1787">  </div> <div data-bbox="448 1749 805 1780"> R/C MODEL RUN CO., LTD </div> <div data-bbox="252 1809 722 1946"> <p>地 址: 中国广东东莞厚街镇汀山村汀坑路61号</p> <p>电 话: (+86)-769-89180133</p> <p>传 真: (+86)-769-85925878</p> <p>网 址: china.skyartec.net</p> <p>电子邮件: james@skyartec.com</p> </div> <div data-bbox="810 1780 1361 1946"> <p>Address: 61# Tingkeng Road, Tingshan, Houjie, Dongguan, Guangdong, China</p> <p>TEL: (+86)-769-89180133</p> <p>FAX: (+86)-769-85925878</p> <p>Website: www.skyartec.com</p> <p>E-mail: james@skyartec.com</p> </div>			